

FORM PTO-1449  
(Modified)U.S. Department of Commerce  
Patent and Trademark Office

Attorney Docket No.: NIH-05065

Serial No.: 09/597,920

INFORMATION DISCLOSURE STATEMENT BY APPLICANT  
(Use Several Sheets If Necessary)Applicant: Lawrence E. Samelson *et al.*

Filing Date: 06/19/00

Group Art Unit: #5

(37 CFR § 1.98(b))

## U.S. PATENT DOCUMENTS

Examiner Initials	Cite No.	Serial / Patent Number	Issue Date	Applicant / Patentee	Class	Subclass	Filing Date
LDA	1	4,683,195	7/28/87	Mullis <i>et al.</i>	—	—	
	2	4,683,202	7/28/87	Mullis	—	—	
	3	5,652,096	7/29/97	Cimino	—	—	
	4	5,608,039	3/4/97	Pastan <i>et al.</i>	—	—	
	5	4,016,043	4/5/77	Schuurs <i>et al.</i>	—	—	
	6	4,424,279	1/3/84	Bohn <i>et al.</i>	—	—	
LDA	7	4,018,653	4/19/77	Mennen	—	—	

## OTHER DOCUMENTS (Including Author, Title, Date, Relevant Pages, Place of Publication)

LDA	8	✓	Weiss <i>et al.</i> , "Signal transduction by lymphocyte antigen receptors," <i>Cell</i> 76:263-274 (1994)
	9	✓	Cantrell, "T Cell Antigen Receptor Signal Transduction Pathways," <i>Annu. Rev. Immunol.</i> , 14:259-274 (1996)
	10	✓	Marmur and Lane, "Strand Separation and Specific Recombination in Deoxyribonucleic Acids: Biological Studies," <i>Proc. Natl. Acad. Sci. USA</i> 46:453 (1960)
	11	✓	Doty <i>et al.</i> , "Strand Separation and Specific Recombination in Deoxyribonucleic Acids: Physical Chemical Studies," <i>Proc. Natl. Acad. Sci. USA</i> 46:461 (1960)
	12	✓	Wallace <i>et al.</i> , (1985) "Application of synthetic oligonucleotides to the diagnosis of human genetic diseases," <i>Biochimie</i> 67:755-762
	13	✓	Studnicki and Wallace, "Allele-Specific Hybridization Using Oligonucleotide Probes of Very High Specific Activity: Discrimination of the Human $\beta^A$ - and $\beta^S$ -Globin Genes," <i>DNA</i> 3:7-15 (1984)
	14	✓	Studnicki <i>et al.</i> , (1985) "Discrimination Among the Human, $\beta^A$ , $\beta^S$ , and $\beta^C$ -Globin Genes Using Allele-Specific Oligonucleotide Hybridization Probes," <i>Human Genetics</i> 37:42-51
	15	✓	Smith and Waterman, "Comparison of Biosequences," <i>Adv. Appl. Math.</i> 2:482-489 (1981)
	16	✓	Needleman and Wunsch, "A General Method Applicable to the Search for Similarities in the Amino Acid Sequence of Two Proteins," <i>J. Mol. Biol.</i> 48:443-453 (1970)
	17	✓	Pearson and Lipman, "Improved Tools for Biological Sequence Comparison," <i>Proc. Natl. Acad. Sci. USA</i> 85:2444 (1988)
	18	✓	Exley <i>et al.</i> , "Association of phosphatidylinositol-3-kinase with a specific sequence of the T cell receptor chain is dependent on T cell activation," <i>J. Biol. Chem.</i> 269:15140-15146 (1994)
	19	✓	Cambier <i>et al.</i> , "Differential binding activity of ARH1/TAM motifs," <i>Immunol. Lett.</i> 44:77-80 (1995)
	20	✓	Isakov <i>et al.</i> , "ZAP-70 binding specificity to T cell receptor tyrosine-based activation motifs: the tandem SH2 domains of ZAP-70 bind distinct tyrosine-based activation motifs with varying affinity," <i>J. Exp. Med.</i> 181:375-380 (1995)
	21	✓	Osman <i>et al.</i> , "The protein interactions of the immunoglobulin receptor family tyrosine-based activation motifs present in the T cell receptor subunits and the CD3, $\epsilon$ and $\delta$ chains," <i>Eur. J. Immunol.</i> 26:1063-1068 (1996)
	22	✓	Caplan <i>et al.</i> , "Cell-surface expressed T-cell antigen-receptor chain is associated with the cytoskeleton," <i>Proc. Natl. Acad. Sci. USA</i> 92:4768-4772 (1995)
	23	✓	Rozdzial <i>et al.</i> , "Tyrosine-phosphorylated T cell receptor chain associates with actin cytoskeleton upon activation of mature T lymphocytes," <i>Immunity</i> 3:623-633 (1995)
	24	✓	Bolen <i>et al.</i> , "Nonreceptor tyrosine protein kinases," <i>Oncogene</i> 8:2025-2031 (1993)
	25	✓	Peri <i>et al.</i> , "Tyrosine protein kinases in T lymphocytes," <i>Chem. Immunol.</i> 59:19-39 (1994)
	26	✓	Jayaraman <i>et al.</i> , "Regulation of the Inositol 1,4,5-trisphosphate receptor by tyrosine phosphorylation," <i>Science</i> 272:1492-1494 (1996)
	27	✓	Cheng <i>et al.</i> , "Syk tyrosine kinase required for mouse viability and B-cell development," <i>Nature</i> 378:303-306 (1995)
LDA	28	✓	Fargnoli <i>et al.</i> , "Syk mutation in Jurkat E6-derived clones results in lack of p72syk expression," <i>J Biol. Chem.</i> 270:26533-26537 (1995)

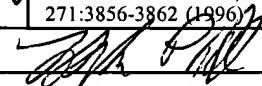
Examiner:

Date Considered:

EXAMINER:

Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449 (Modified)		U.S. Department of Commerce Patent and Trademark Office		Attorney Docket No.: NIH-05065	Serial No.: 09/597,920
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (Use Several Sheets, If Necessary) (37 CFR § 1.98(b))				Applicant: Lawrence E. Samelson <i>et al.</i>	
				Filing Date: 06/19/00	Group Art Unit:
OTHER DOCUMENTS (Including Author, Title, Date, Relevant Pages, Place of Publication)					
29	✓	Turner <i>et al.</i> , "Perinatal lethality and blocked B-cell development in mice lacking the tyrosine kinase Syk," <i>Nature</i> 378:298-302 (1995)			
30	✓	Arpaia <i>et al.</i> , "Defective T cell receptor signaling and CD8+ thymic selection in humans lacking ZAP-70 kinase," <i>Cell</i> 76:947-958 (1994)			
31	✓	Chan <i>et al.</i> , "ZAP-70 deficiency in an autosomal recessive form of severe combined immunodeficiency," <i>Science</i> 264:1599-1601 (1994)			
32	✓	Elder <i>et al.</i> , "Human severe combined immunodeficiency due to a defect in ZAP-70, a T cell tyrosine kinase," <i>Science</i> 264:1596-1599 (1994)			
33	✓	Negishi <i>et al.</i> , "Essential role for ZAP-70 in both positive and negative selection of thymocytes," <i>Nature</i> 376:435-438 (1995)			
34	✓	Chan <i>et al.</i> , "ZAP-70: a 70 kd protein-tyrosine kinase that associates with the TCR $\zeta$ chain," <i>Cell</i> 71:649-662 (1992)			
35	✓	Watts <i>et al.</i> , "Identification by electrospray ionization mass spectrometry of the sites of tyrosine phosphorylation induced in activated Jurkat T cells on the protein tyrosine kinase ZAP-70," <i>J. Biol. Chem.</i> 269:29520-29529 (1994)			
36	✓	Guanghui <i>et al.</i> , "Distinct tyrosine phosphorylation sites within ZAP-70 mediate activation and negative regulation of antigen receptor function," <i>Mol. Cell. Biol.</i> (1996)			
37	✓	Chan <i>et al.</i> , "Activation of ZAP-70 kinase activity by phosphorylation of tyrosine 493 is required for lymphocyte antigen receptor function," <i>EMBO J.</i> 14:2499-2508 (1995)			
38	✓	Wange <i>et al.</i> , "Activating and inhibitory mutations in adjacent tyrosines in the kinase domain of ZAP-70," <i>J. Biol. Chem.</i> 270:18730-18733 (1995)			
39	✓	Wange <i>et al.</i> , "Tandem SH2 domains of ZAP-70 bind to T cell antigen receptor and CD3 from activated Jurkat T cells," <i>J. Biol. Chem.</i> 268:19797-19801 (1993)			
40	✓	Iwashima <i>et al.</i> , "Sequential interactions of the TCR with two distinct cytoplasmic tyrosine kinases," <i>Science</i> 263:1136-1139 (1994)			
41	✓	Wange <i>et al.</i> , "F2(Pmp)2-TAM 3, a novel competitive inhibitor of the binding of ZAP-70 to the T cell antigen receptor, blocks early T cell signaling," <i>J. Biol. Chem.</i> 270:944-948 (1995)			
42	✓	Qian <i>et al.</i> , "Dominant-negative Zeta-associated Protein 70 Inhibits T Cell Antigen Receptor Signaling," <i>J. Exp. Med.</i> 183:611-620 (1996)			
43	✓	van Oers <i>et al.</i> , "Constitutive tyrosine phosphorylation of the T-cell receptor (TCR) subunit: regulation of TCR-associated protein tyrosine kinase activity by TCR $\zeta$ ," <i>Mol. Cell. Biol.</i> 13:5771-5780 (1993)			
44	✓	Wiest <i>et al.</i> , "TCR activation of ZAP-70 is impaired in CD4+CD8+ thymocytes as a consequence of intrathymic interactions that diminish available p56lck," <i>Immunity</i> 4:495-504 (1996)			
45	✓	Desiderio <i>et al.</i> , "The Itk/Btk/Tec Family of Protein-Tyrosine Kinases," <i>Chem. Immunol.</i> 59:191-208 (1994)			
46	✓	Liao <i>et al.</i> , "Altered T cell receptor signaling and disrupted T cell development in mice lacking Itk," <i>Immunity</i> 3:757-769 (1995)			
47	✓	Gibson <i>et al.</i> , "The EMT/ITK/TSK (EMT) tyrosine kinase is activated during TCR signaling," <i>J. Immunol.</i> 156:2716-2722 (1996)			
48	✓	Bustelo <i>et al.</i> , "Product of the Vav protooncogene defines a new class of tyrosine protein kinase substrates," <i>Nature</i> 356: 68-74 (1992)			
49	✓	Donovan <i>et al.</i> , "The protein product of the c-cbl protooncogene is the 120-kDa tyrosine-phosphorylated protein in Jurkat cells activated via the T cell antigen receptor," <i>J. Biol. Chem.</i> 269:22921-22924 (1994)			
50	✓	Jackman <i>et al.</i> , "Molecular cloning of SLP-76, a 76-kDa tyrosine phosphoprotein associated with Grb2 in T cells," <i>J. Biol. Chem.</i> 270:7029-7032 (1995)			
51	✓	Harrison <i>et al.</i> , "Phosphorylation of human erythrocyte band 3 by endogenous p72syk," <i>J. Biol. Chem.</i> 269:955-959 (1994)			
52	✓	Peters <i>et al.</i> , "Syk, activated by cross-linking the B-cell antigen receptor, localizes to the cytosol where it interacts with and phosphorylates alpha-tubulin on tyrosine," <i>J. Biol. Chem.</i> 271:4755-4762 (1996)			
53	✓	Ley <i>et al.</i> , "Tyrosine phosphorylation of tubulin in human T lymphocytes," <i>Eur. J. Immunol.</i> , 24:99-106 (1994)			
54	✓	Huby <i>et al.</i> , "Interactions between the Protein-tyrosine Kinase ZAP-70, the Proto-oncoprotein Vav, and Tubulin in Jurkat T Cells," <i>J. Biol. Chem.</i> , 270:30241-30244 (1995)			
55	✓	Wardenburg <i>et al.</i> , "Phosphorylation of SLP-76 by the ZAP-70 protein tyrosine kinase is required for T cell receptor function," <i>J. Biol. Chem.</i> , In press (1996)			
56	✓	Wu <i>et al.</i> , "Vav and SLP-76 interact and functionally cooperate in IL-2 gene activation," <i>Immunity</i> 4:593-602 (1996)			
Examiner: <i>[Signature]</i>			Date Considered: 2/13/02		
<b>EXAMINER:</b> Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.					

FORM PTO-1449 (Modified)		U.S. Department of Commerce Patent and Trademark Office		Attorney Docket No.: NIH-05065	Serial No.: 09/597,920
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (On Several Sheets, if Necessary) (37 CFR § 1.98(b))				Applicant: Lawrence E. Samelson <i>et al.</i>	
				Filing Date: 06/19/00	Group Art Unit:
OTHER DOCUMENTS (Including Author, Title, Date, Relevant Pages, Place of Publication)					
57	✓	Fusaki <i>et al.</i> , "Physical and functional interactions of protein tyrosine kinases, p59fyn and ZAP-70, in T cell signaling," <i>J. Immunol.</i> 156:1369-1377 (1996)			
58	✓	Vogel <i>et al.</i> , "The SH3 domain of p56lck is involved in binding to phosphatidylinositol 3'-kinase from T lymphocytes," <i>Mol. Cell. Biol.</i> , 13:7408-7417 (1993)			
59	✓	Thome <i>et al.</i> , "Syk and ZAP-70 mediate recruitment of p56lck/CD4 to the activated T cell receptor/CD3/ complex," <i>J. Exp. Med.</i> , 181:1997-2006 (1995)			
60	✓	Hatada <i>et al.</i> , "Molecular basis for interaction of the protein tyrosine kinase ZAP-70 with the T-cell receptor," <i>Nature</i> 377:32-38 (1995)			
61	✓	Shiue <i>et al.</i> , "Syk is activated by phosphotyrosine-containing peptides representing the tyrosine-based activation motifs of the high affinity receptor for IgE," <i>J. Biol. Chem.</i> 270:10498-10502 (1995)			
62	✓	Neumeister <i>et al.</i> , "Binding of ZAP-70 to phosphorylated T-cell receptor and enhances its autophosphorylation and generates specific binding sites for SH2 domain-containing proteins," <i>Mol. Cell. Biol.</i> 15:3171-3178 (1995)			
63	✓	Isakov <i>et al.</i> , "Purification and characterization of human ZAP-70 protein tyrosine kinase from a baculovirus expression system," <i>J. Biol. Chem.</i> 271:15753-15761 (1996)			
64	✓	Katzav <i>et al.</i> , "The protein tyrosine kinase ZAP-70 can associate with the SH2 domain of proto-vav," <i>J. Biol. Chem.</i> 269:32579-32585 (1994)			
65	✓	Fournel <i>et al.</i> , "Association of tyrosine protein kinase ZAP-70 with the protooncogene product p120c-cbl in T lymphocytes," <i>J. Exp. Med.</i> 183:301-306 (1996)			
66	✓	Downward, "The GRB2/Sem-5 adaptor protein," <i>FEBS Lett.</i> 338: 113-117 (1994)			
67	✓	Meisner <i>et al.</i> , "Interaction of Cbl with Grb2 and Phosphatidylinositol-3'-Kinase in Activated Jurkat Cells," <i>Mol. Cell. Biol.</i> 15:3571-3578 (1995)			
68	✓	Holsinger <i>et al.</i> , "Signal transduction in T lymphocytes using a conditional allele of Sos," <i>Proc. Natl. Acad. Sci. USA</i> 92:9810-9814 (1995)			
69	✓	Rayichandran <i>et al.</i> , "Interaction of Shc with Grb2 regulates association of Grb2 with mSOS," <i>Mol. Cell. Biol.</i> 15:593-600 (1995)			
70	✓	Osman <i>et al.</i> , "A comparison of the interaction of Shc and the tyrosine kinase ZAP-70 with the T cell antigen receptor chain tyrosine-based activation motif," <i>J. Biol. Chem.</i> 270:13981-13986 (1995)			
71	✓	Motto <i>et al.</i> , "In vivo association of Grb2 with pp116, a substrate of the T cell antigen receptor-activated protein tyrosine kinase," <i>J. Biol. Chem.</i> 269:21608-21613 (1994)			
72	✓	Buday <i>et al.</i> , "A complex of Grb2 adaptor protein, Sos exchange factor, and a 36-kDa membrane-bound tyrosine phosphoprotein is implicated in ras activation in T cells," <i>J. Biol. Chem.</i> 269:9019-9023 (1994)			
73	✓	Reif <i>et al.</i> , "SH3 domains of the adapter molecule Grb2 compete with two proteins in T cells: the guanine nucleotide exchange protein SOS and a 75-kDa protein that is a substrate for T cell antigen receptor-activated tyrosine kinases," <i>J. Biol. Chem.</i> 269:14081-14087 (1994)			
74	✓	Fukazawa <i>et al.</i> , "T cell activation-dependent association between the p85 subunit of the phosphatidyl 3-kinase and Grb2/phospholipase C- $\gamma$ 1-binding phosphotyrosyl protein," <i>J. Biol. Chem.</i> 270:36-38, 20177-20182 (1995)			
75	✓	Li <i>et al.</i> , "Activation-modulated association of 14-3-3 proteins with Cbl in T cells," <i>J. Biol. Chem.</i> 271:14591-14595 (1996)			
76	✓	Reedquist <i>et al.</i> , "Stimulation through the T cell receptor induces Cbl association with Crk proteins and guanine nucleotide exchange protein C3G," <i>J. Biol. Chem.</i> 271:8435-8442 (1996)			
77	✓	Motto <i>et al.</i> , "Implications of the GRB2-associated phosphoprotein SLP-76 in T cell receptor-mediated interleukin 2 production," <i>J. Exp. Med.</i> 183:1937-1943 (1996)			
78	✓	McFarland <i>et al.</i> , "Protein tyrosine phosphatases involved in lymphocyte signal transduction," <i>Chem. Immunol.</i> 59:40-61 (1994)			
79	✓	Plas <i>et al.</i> , "Direct regulation of ZAP-70 by SHP-1 in T cell antigen receptor signaling," <i>Science</i> 272:1173-1176 (1996)			
80	✓	Kon-Kozlowski <i>et al.</i> , "The tyrosine phosphatase PTP1C associates with Vav, Grb2, and mSosl in hematopoietic cells," <i>J. Biol. Chem.</i> 271:3856-3862 (1996)			
Examiner: 			Date Considered: 2/13/02		
EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.					

FORM PTO-1449  
(Modified)U.S. Department of Commerce  
Patent and Trademark Office

Attorney Docket No.: NIH-05065

Serial No.: 09/597,920

INFORMATION DISCLOSURE STATEMENT BY APPLICANT  
(See Several Sheets if Necessary)Applicant: Lawrence E. Samelson *et al.*

Filing Date: 06/19/00

Group Art Unit:

(37 CFR § 1.98(b))

## OTHER DOCUMENTS (Including Author, Title, Date, Relevant Pages, Place of Publication)

- |     |   |   |            |
|-----|---|---|------------|
| 81  | ✓ | Marengere <i>et al.</i> , "Regulation of T cell receptor signaling by tyrosine phosphatase SYP association with CTLA-4," <i>Science</i> 272:1170-1173 (1996)  |            |
| 82  | ✓ | DeGillard and Hoffman, <i>Basic Facts about Lymphocyte Hybridomas</i> , in <i>Compendium of Immunology</i> Vol II, ed. by Schwartz, 1981  |            |
| 83  | ✓ | Kohler and Milstein, "Continuous cultures of fused cells secreting antibody of predefined specificity," <i>Nature</i> 256: 495-497 (1975)   |            |
| 84  | ✓ | Kohler and Milstein, "Derivation of specific antibody-producing tissue culture and tumor lines by cell fusion," <i>Euro. J. of Immunology</i> 6: 511-519 (1976)   |            |
| 85  | ✓ | Reading, "Theory and Methods for Immunization in Culture and Monoclonal Antibody Production," <i>J. of Immuno. Meth.</i> 53: 261-291, 1982  |            |
| 86  | ✓ | Sambrook <i>et al.</i> , <i>Molecular Cloning: A Laboratory Manual</i> , 2d ed. (1989) Cold Spring Harbor Laboratory Press, Cold Spring Harbor, N.Y.  |            |
| 87  | ✓ | Current Protocols in Molecular Biology (1996) John Wiley and Sons, Inc., N.Y. COVER PAGE  | COVER PAGE |
| 88  | ✓ | Sirna <i>et al.</i> , "Polymer support oligonucleotide synthesis XVIII <sup>(1,2)</sup> : use of $\beta$ -cyanoethyl-N,N-dialkylamino-N-morpholino phosphoramidite of deoxynucleosides for the synthesis of DNA fragments simplifying deprotection and isolation of the final product," <i>Nuc. Acids Res.</i> 12:4539 (1984) |            |
| 89  | ✓ | Samelson <i>et al.</i> , "Association of the fyn protein-tyrosine kinase with the T-cell antigen receptor," <i>Proc. Natl. Acad. Sci. USA</i> 87:4358-4362 (1990)   |            |
| 90  | ✓ | Kung <i>et al.</i> , "Monoclonal antibodies defining distinctive human T cell surface antigens," <i>Science</i> 206:347-349 (1979)  |            |
| 91  | ✓ | Mitsushima <i>et al.</i> , "pEF-BOS, a powerful mammalian expression vector," <i>Nuc. Acids Res.</i> 18:5322 (1990)   |            |
| 92  | ✓ | Seed, "An LFA-3 cDNA encodes a phospholipid-linked membrane protein homologous to its receptor CD2," <i>Nature</i> 329:840-842 (1987)   |            |
| 93  | ✓ | Nagata <i>et al.</i> , "Molecular cloning and expression of cDNA for human granulocyte colony-stimulating factor," <i>Nature</i> 319: 415-418 (1986)  |            |
| 94  | ✓ | Uetsuki <i>et al.</i> , "Isolation and Characterization of the Human Chromosomal Gene for Polypeptide Chain Elongation Factor-1 $\alpha$ ," <i>J. Biol. Chem.</i> , 264:5791-5798 (1989)  |            |
| 95  | ✓ | Spencer <i>et al.</i> , "Controlling signal transduction with synthetic ligands." <i>Science</i> 262:1019-1024 (1993)   |            |
| 96  | ✓ | Berger <i>et al.</i> , "Secreted placental alkaline phosphatase: a powerful new quantitative indicator of gene expression in eukaryotic cells," <i>Gene</i> 66:1-10 (1988)  |            |
| 97  | ✓ | Sloan-Lancaster <i>et al.</i> , "Regulation of ZAP-70 intracellular localization: visualization with the green fluorescent protein," <i>J. Exp. Med.</i> 186:1713-1724 (1997)   |            |
| 98  | ✓ | GENBANK ACCESSION No. L05148 8/1993   |            |
| 99  | ✓ | GENBANK ACCESSION No. Z29630 6/1994   |            |
| 100 | ✓ | GENBANK ACCESSION No. M96995 12/94  |            |
| 101 | ✓ | GENBANK ACCESSION No.X16316 2/1997  |            |
| 102 | ✓ | GENBANK ACCESSION No.X57110 12/92   |            |

Examiner:

Date Considered: 2/13/02

EXAMINER:

Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449  
(Modified)U.S. Department of Commerce  
Patent and Trademark Office

Attorney Docket No.: NIH-05065

Serial No.: 09/597,920

INFORMATION DISCLOSURE STATEMENT BY APPLICANT  
(Use Several Sheets if Necessary)Applicant: Lawrence E. Samelson *et al.*

Filing Date: 06/19/00

Group Art Unit:

(37 CFR § 1.98(b))

## OTHER DOCUMENTS

- 103 ✓ Zhang *et al.*, "LAT: the ZAP-70 tyrosine kinase substrate that links T cell receptor to cellular activation," *Cell* 92:83-92 (1998)
- 104 ✓ Songyang *et al.*, "Specific motifs recognized by the SH2 domains of Csk, 3BP2, fps/fes, GRB-2, HCP, SHC, Syk and Vav," *Mol. Cell. Biol.* 14:2777-2785 (1994)
- 105 ✓ Alland *et al.*, "Dual myristylation and palmitoylation of Src family member p59<sup>lyn</sup> affects subcellular localization," *J. Biol. Chem.* 269:16701-16705 (1994)
- 106 ✓ Shenoy-Scaria *et al.*, "Cysteine of Src family protein tyrosine kinases determines palmitoylation and localization in caveolae" *J. Cell Biol.* 126:353-363 (1994)
- 107 ✓ Simons and Ikonen, "Functional rafts in cell membranes" *Nature* 387:569-572 (1997)
- 108 ✓ Brown and Rose, "Sorting of GPI-anchored proteins to glycolipid-enriched membrane subdomains during transport to the apical cell surface" *Cell* 68:533-544 (1992)
- 109 ✓ Marth *et al.*, "Lymphocyte activation provokes modification of a lymphocyte-specific protein tyrosine kinase (p56lck)," *J. Immunol.* 142:2430-2437 (1989)
- 110 ✓ Chipstone and Crabtree, "Identification of calcineurin as a key signaling enzyme in T-lymphocyte activation" *Nature* 357:695-697 (1992)
- 111 ✓ GENBANK ACCESSION No. AA535611 8/21/97
- 112 ✓ Sieh *et al.*, "Grb2 and phospholipase C-gamma associate with a 36- to 38- kilodalton phosphotyrosine protein after T-cell receptor stimulation," *Mol. Cell. Biol.* 14:4435-42 (1994)
- 113 ✓ Weber *et al.*, "Molecular cloning of the cDNA encoding pp36, a tyrosine-phosphorylated adapter protein selectively expressed by T cells and natural killer cells," *J. Exp. Med.* 187:1157-61 (1998)
- 114 ✓ Zhang *et al.*, "LAT: the ZAP-70 tyrosine kinase substrate that links T cell receptor to cellular activation," *Cell* 92:83-92 (1998)
- 115 ✓ Huang *et al.*, "Cloning and characterization of Lnk, a signal transduction protein that links T-cell receptor activation signal to phospholipase Cγ, Grb2, and phosphatidylinositol 3-kinase," *Proc. Natl. Acad. Sci. USA* 92:11618

Examiner:

Date Considered: 2/13/02

EXAMINER:

Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.